

# PHASE LOCKED LOOP FOR CONTROLLING AN OPTICAL RECORDING DEVICE AND METHOD THEREOF

## Abstract

A PLL system for generating an output signal according to a first reference signal is disclosed. The output signal is used as a reference clock to write recording data on an optical medium. The PLL system includes a clock generator for receiving the first reference signal and a first frequency-divided signal to generate the output signal according to a phase difference between the first reference signal and the first frequency-divided signal; a phase-shift detector for generating a phase adjusting signal; and a phase-controllable frequency divider for dividing the frequency of the output signal by a frequency dividing ratio to generate the first frequency-divided signal and for receiving the phase adjusting signal to adjust the phase of the first frequency-divided signal.